

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Smith, S.

Examiner: Isabella, D.

Serial No.:

10/630,562

Group Art Unit: 3738

Filed: July 30, 2003

Docket: 760-12 DIV/CON

For:

HELICALLY FORMED

STENT/GRAFT ASSEMBLY

Dated: October 7, 2004

Confirmation No.: 8643

I hereby certify this correspondence is being deposited with the United States Postal Service as first class mail, postpaid in an envelope, addressed to: Commissioner for Patents, Alexandria, VA 22313.

Dated: October

Signature: Barbara Thomas

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

DECLARATION OF PRIOR INVENTION IN THE UNITED STATES TO OVERCOME A CITED PATENT UNDER 37 C.F.R. §1.131

Sir:

- I, Scott Smith, a citizen of the United States, residing at 6950 Country Road #10, Chaska, Minnesota 55318, is the inventor of the above-identified application.
- At the time of the invention thereof and continuously to the present, I was and am an employee of SCIMED Life Systems, Inc., assignee of the present application. I submit this declaration to establish completion of the invention set forth in this application in the United States at a date prior to March 31, 1998, i.e., the effective date of U.S. Patent No. 6,063,111 to Hieshima et al. which was cited by the Examiner in an Office Action mailed, July 8, 2004.

- 3. From the documents submitted herewith and as set forth hereinbelow, it can be seen that the invention set forth in the claims of this application was completed in the United States before March 31, 1998, which is a date earlier than the U.S. filing date of the '111 Patent. Such completion being evidenced by conception of the invention prior to the effective date of the reference coupled with due diligence from prior to that date to the subsequent filing of the application. Exhibits A through I are submitted in support thereof. The Exhibits A through I are being submitted with their dates redacted. The actual document dates of Exhibits A and B are prior to March 31, 1998. The actual document dates of Exhibits C through I are after March 31, 1998, but prior to constructive reduction to practice date of July 2, 1999, i.e., the filing date of the parent Application No. 09/345,026, now U.S. Patent No. 6,364,904. A brief description of the documents being submitted are as follows:
 - a. An invention disclosure (Exhibit A) bearing a date signed by myself, the inventor, prior to March 31, 1998, the filing date of the '111 Patent. The invention disclosure describes the invention as substantially set forth in the claims of the above-referenced application. The invention disclosure describes the use of a flat stent strip for use as a covered stent. The stent or stent strip is described being compressed against a layer or layers of flat ePTFE to form an assembly. This assembly is described as then being wrapped on a mandrel followed by laminating the components together. Alternately, the assembly may be laminated together prior to being wrapped on a mandrel.
 - b. A letter prior to March 31, 1998 (Exhibit B) from Assignee's Patent Attorney to outside patent counsel enclosing the invention disclosure of Exhibit A and

- requesting the preparation of a patent application.
- c. A letter dated after March 31, 1998 and prior to constructive reduction to practice date of July 2, 1999 (Exhibit C) from outside patent counsel to Assignee's Patent Attorney reporting three application matters, including one for the parent (Docket No. 760-12, now U.S. Patent No. 6,364,904) of the above-referenced application, for the above-mentioned and related invention disclosures.
- d. A letter dated after March 31, 1998 and prior to constructive reduction to practice date of July 2, 1999 (Exhibit D) from outside patent counsel to myself, the inventor, reporting the enclosure of drafts of three applications, including a draft of the parent of the above-referenced application.
- e. A letter dated after March 31, 1998 and prior to constructive reduction to practice date of July 2, 1999 (Exhibit E) from Assignee's Patent Attorney to outside patent counsel reporting comments on the draft parent application.
- f. A letter dated after March 31, 1998 and prior to constructive reduction to practice date of July 2, 1999 (Exhibit F) from outside patent counsel to Assignee's Patent Attorney reporting the preparation of three application drafts, including a draft of the above-mentioned parent patent application, for further review by myself, the inventor.
- g. A letter dated after March 31, 1998 and prior to constructive reduction to practice date of July 2, 1999 (Exhibit G) from the Assistant to Assignee's Patent Attorney to outside patent counsel reporting additional comments relating to three draft

applications, including the above-mentioned parent application.

- h. A letter dated after March 31, 1998 and prior to constructive reduction to practice date of July 2, 1999 (Exhibit H) from outside patent counsel to Assignee's Patent

 Attorney reporting the enclosure of three additional application drafts, including a draft of the above-mentioned parent application for review.
- i. A letter dated after March 31, 1998 and prior to constructive reduction to practice date of July 2, 1999 (Exhibit I) from Assignee's Patent Attorney to outside patent counsel enclosing three executed patent applications, including the abovementioned parent application, and requesting that the application be filed.
- 4. This declaration is being submitted in response to a Non-Final Office Action issued by the Examiner and therefore is believed to be timely filed.
- 5. The above-referenced exhibits establish a date of invention prior to March 31, 1998, the filing date of the '111 patent, and further establish diligence from that date to the filing date of the parent application, namely July 2, 1999.

I hereby declare that all statements made herein of my knowledge are true and that all statements made on information or belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States

Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Dated:

Coott Smit

HOFFMANN & BARON, LLP 6900 Jericho Turnpike Syosset, New York 11791 (973) 331-1700

SCIMED

Invention_Disclosure_Form

page 1 of ____

Descriptive Title of Invention:	Spiral Word Spi	I Start	₹.*	
Inventor (s): Scott SA	with Bria Brown.			
Date of Invention:			·	
Date of First Drawing:			,	
Date of First Written Descript	ion:			
Date of Disclosure:			•	
Internal:	To Whom:	(circle Written	Oral	_
External:	To Whom:	(circle Written	one) Oral	COP
Description of Invention: W	ourd Spiral Store	tel Start.	-	Щ
	acepts: Brian Braun	Start Designs		T AVAILARI
	ned from a N. +	ind on It. A	- T-1	BES1
	t, wound, attocked or			ш
	Tset in enords		1275	
0 0	7	0		
Unique feature of invention:	esed realif anulable	M.T. Ribhr	n (wla wire))
with Minimal weldie	or Bording The produce	a Self example	in Start	
Pralued sconomich using	Flot shat techniques de cotting. There proce	ibetike um	FDNU Las	: 4
Advantages of unique feature:	Cotting there proce	se capperla	e sertioned	
funds order the	hyle Quelit than	in, the toballor &	hyrs-	
Forthe More, well	ryle Quelit than	to munining	mpat	
on errorsing	yestis.			
· · · · · · · · · · · · · · · · · · ·	•			

000922 .50 SHEETS 100 SHEETS 200 SHEETS 22-141 22-142 22-144

000941 7:00 FM deplicate and settening Design -EST for endo variable Start and Start graft desyn. 1. Spiral Slottal take Start (Note-See Bring Brown notabook)

2 5 il the start (EFN) to Early version. 2. Spiral etch, fold, weld Start (EFW) 3. Spiral flat Strip Start 9. Consistion or articulation for above Start 5, Coveral Start made from start # 3 above a. 2 tr More Layer Sondwich 6. MHi-hely version of Abone Start 1, 2, 3, 4,5 I. a cut or etalet Stated take stant with the starts distributed in a helicit Possible and trentment * 2. Start # (formed from a Hat shat and Rolled into a Cylinde on welder or otherwise Attackel. end Bren Inverted by france 7 mild Lasta FFW (5)

000341

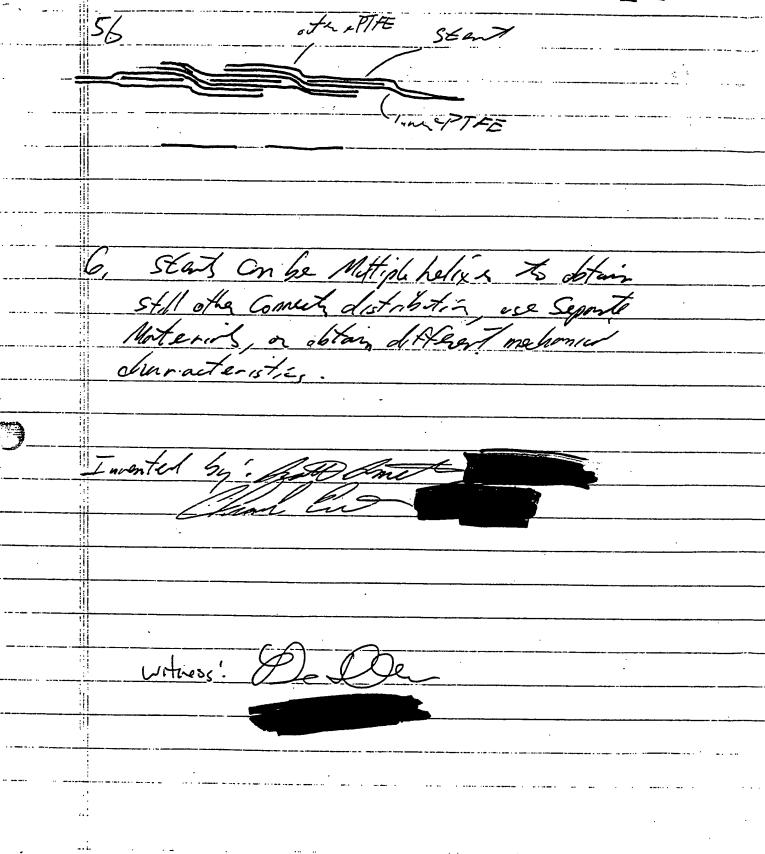
3. Since large, thin Flat short not really available, use Long thin Strip to produce N.T. Start. Invented by. Atte

received the

ś

000941

4. Consertion of Articulation: Specific Petters of Connection between Stant Signer's result in improved (More Uniform, Love force, less Kinking) flexibility of Sterts es. Radius 18 Strots each Sunt offert by 3-storts Intern: 30 Sents
3 Connectors each Separt offset by 5 Starts Spral Starts Illow A Uniterm Connection distribtion using other #'s of Strats. folditainly,
The Constant and State are distributed more ensounty Axial or well 5, Govered Starts com be made from or Follow: 1. maja a PTAE Montome on Mondul a. ump Stent or Load Stent on Monthelon & PTIE 3. Apply more efter on top. 1. head of Compress to Bond Cargen together Alternatively, A compress strip start (#3) between & Cayer of Flat stiff and heat, then was on Monthel end re heat. Actually, 13ther 15tap not necessary Inomtal by! Addmets



SCIMED® Boston Scientific Corporation

EXHIBIT B

SCIMED Life Systems, Inc. One SCIMED Place Maple Grove, MN 55311-1566 612-494-1700



Daniel A. Scola, Jr., Esq. HOFFMAN & BARON 1055 Parsippany Boulevard Parsippany, NJ 07054

RE: Invention Disclosures 922, 927 and 941

SCIMED File Nos.: SM-P0357-US01 and SM-P0406-US01

Dear Dan:

Under letters of and analysis of this year, you received copies of the three above-mentioned disclosure forms. To insure that you have complete sets, another copy of each is enclosed. At this time, I would like you to begin preparing the two patent applications directed to these inventions. Invention Disclosure 927 and parts of Invention Disclosure 941 should be included in a patent application directed to Spiral Wound Stents (our file SM-P0357-US01). I have enclosed a copy of SCIMED's Application WO95/31945. Invention Disclosure 922 and the remainder of 941 are directed to an improved vascular stent graft device (our file SM-P0406-US01).

If you have any questions concerning these disclosures, feel free to contact me.

Sincerely,

Luke Dohmen Sr. Patent Attorney

LD:dl Enclosure

EXHIBIT C

Hoffmann & Baron, llp

CHARLES R. HOFFMANN RONALD J. BARON* GERALD T. BODNER® DANIEL A. SCOLA, JR.

ALAN M. BACK** A. THOMAS KAMMER ARLENE D. MORRIS R. GLENN SCHROEDER* GLENN T. HENNEBERGER*** LIVIA BOYADJIAN* SEAN W. P'DEA[†] SALVATORE E ABBRUZZESE LINDSAY S. ADAMS KIRK M. MILES

PAUL J. OTTERSTEDT JESSICA H. TRANT IRVING N. FEIT® ANTHONY E. BENNETT* KEVIN C. HOOPERT PAUL D. ACKERMAN** ROBERT F. CHISHOLM™ GREGORY W. BACHMANN* FRANKLIN S. ABRAMS*

ATTORNEYS AT LAW 1055 PARSIPPANY BLVD. PARSIPPANY, NEW JERSEY 07054 (973) 331-1700 FACSIMILE (973) 331-1717

NEW YORK OFFICE 350 JERICHO TURNPIKE JERICHO, N.Y. 11753-1317 (516) 822-3550 FAX (516) 822-3582

ADMITTED IN NY ONLY, ALSO ADMITTED IN NY ADMITTED IN NY 6 CONN ONLY ALSO ADMITTED IN CONNECTICUT ADMITTED IN WASHINGTON, D.C. ONLY ALSO ADMITTED IN PENNSYLVANIA ADMITTED IN PENNSYLVANIA ONLY ADMITTED IN VIRGINIA ONLY



Luke Dohmen, Esq. SCIMED Life Systems, Inc. One SCIMED Place Maple Grove, MN 55311-1566

Re:

SCIMED Patent Applications

Our Dockets: 760-6; 760-7; 760-12

Dear Luke:

In response to your request of today, listed below is the information on the three (3) above-identified SCIMED patent applications:

Our Docket:

760-6

SCIMED Reference:

ID 927 and Part of ID 941

File # SM-P0357-US01

Title:

Spiral Wound Stent

Inventors:

Scott Smith and Brian Brown

Our Docket:

760-7

SCIMED Reference:

ID 922

File # SM-P0406-US01

Title:

Improved Composite Vascular Graft

Inventor:

Scott Smith

Our Docket:

760-12

SCIMED Reference:

ID 941

Title:

File # SM-P0406-US01

Improved Stent/Graft Device

Inventor:

Scott Smith

Luke Dohmen, Esq.

Page 2

If you need anything further, please do not hesitate to contact us.

Sincerely,

Daniel A. Scola, Jr.

DAS/kg

EXHIBIT D

HOFFMANN & BARON, LL

RONALD J. BARON® GERALD T. BODNER® DANIEL A. SCOLA, JR. A. THOMAS KAMMER* SALVATORE J. ABBRUZZESE

ALAN M. SACK+

ARLENE D. MORRIS" R. GLENN SCHROEDER," GLENN THENNEBERGER WAYNE L. ELLENBOGEN LIVIA BOYADJIAN KIRK M. MILES JESSICA H. TRAN®

ANTHONY E. BENNETT

ROBERT F. CHISHOLM

KEVIN C. HOOPER

IRVING N. FEIT++ FRANKLIN S. ABRAMS* MARK E. BARON STEVEN T. ZUSCHLAG KELLYANNE MERKEL SUSAN A. SIPOS SAMIR R. PATEL WILLIAM D. SCHMIDT

MICHAEL P. MUNRO

1055 PARSIPPANY BLVD. PARSIPPANY, NEW JERSEY 07054 (973) 331-1700 FACSIMILE (973) 331-1717

NEW YORK OFFICE 350 JERICHO TURNPIKE JERICHO, N.Y. 11753-1317 (516) 822-3550 FAX (516) 822-3582

> NOT ADMITTED IN N.J. SENIOR ATTORNEYS



Scott Smith SCIMED Life Systems, Inc. One SCIMED Place Maple Grove, MN 55311-1566

Re:

GREGORY W. BACHMANN® PATRICK J. HOEFFNER®

New Patent Applications

Our Docket: 760-6; 760-7 and 760-12

Dear Scott:

Please find enclosed the application drafts for the above-referenced applications, which respectively correspond to the following inventions:

Our Docket:

760-6

SCIMED Reference:

ID 927 and Part of ID 941

File # SM-P0357-US01

Title:

Spiral Wound Stent

Inventors:

Scott Smith and Brian Brown

Our Docket:

760-7

SCIMED Reference:

ID 922

File # SM-P0456-US01

Title:

Improved Composite Vascular Graft

Inventor:

Scott Smith

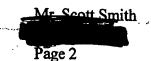
Our Docket:

760-12

SCIMED Reference:

ID 941

File # SM-P0466-US01



Title:

Helically Formed Stent and Graft Assembly

Inventor:

Scott Smith

With respect to the IMPROVED STENT/GRAFT DEVICE (760-12) it is a partial draft with claims, figures, and background of invention included.

Please forward a copy of the SPIRAL WOUND STENT (760-6) application draft to Brian Brown. Dan Scola of this office will discuss the applications with you tomorrow.

In the meantime, should you any questions or comments, please communicate them with us at your convenience.

Very truly yours,

Mark E. Baron

MEB/mjm Enclosures

cc: L. Dohmen

Scientific SCIMED

EXHIBIT E

Scimed Life Systems, Inc. One Scimed Place Maple Grove, MN 55311-1566 612.494.1700 www.bsci.com

Daniel J. Scola, Esq. Hoffmann & Baron, LLP 1055 Parsippany Blvd. Parsippany, NJ 07054

PRIVILEGED & CONFIDENTIAL

Re.

U.S. Draft Patent Application for:

HELICALLY FORMED STENT AND GRAFT ASSEMBLY

Your File: 760-12

Our File: SM-P0406-US01

Dear Dan:

Enclosed are our comments for the above-referenced draft patent application. Please contact me after you have had a chance to review the enclosed material.

Thank you for your assistance in this matter.

Very truly yours,

Suke Johnen /ed/

Enclosure

LD/ld

EXHIBIT F

Hoffmann & Baron, llp

James & Bayman College CHARLES R. HOFFMANN® RONALD J. BARON® GERALD T. BODNER* DANIEL A. SCOLA, JR.

A. THOMAS KAMMER* SALVATORE J. ABBRUZZESE ALAN M. SACK IRVING N. FEIT+

ARLENE D. MORRIST

R. GLENN SCHROEDER* GLENN T. HENNEBERGER" WILLIAM D. SCHMIDT" KIRK M. MILES JESSICA H. TRAN® ANTHONY E. BENNETT ROBERT F. CHISHOLM GREGORY W. BACHMANN® DAVID P. PETROFF® MARK E. BARON WAYNE L. ELLENBOGEN STEVEN T. ZUSCHLAG* KELLYANNE MERIEL SUSAN A. SIPOS

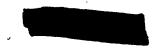
SAMIR R. PATEL MICHAEL P. MUNRO PATRICK J. HOEFFNER* JAMES F. HARRINGTON KEVIN E. MCDERMOTT* RODERICK S.W. TURNER ROBERT C. MORRISS* NANCY A. BIRD® JOHN S. SOPKO

ATTORNEYS AT LAW 1055 PARSIPPANY BLVD. PARSIPPANY, NEW JERSEY 07054 (973) 331-1700 FACSIMILE (973) 331-1717

NEW YORK OFFICE 6900 JERICHO TURNPIKE SYOSSET, N.Y. 11791 (816) 822-3550 FAX (516) 822-3582

NOT ADMITTED IN N.J. SENIOR ATTORNEY

i karing kabupatèn k



Luke Dohmen, Esq. SCIMED Life Systems, Inc. One SCIMED Place Maple Grove, MN 55311-1566

Re:

New Patent Application For: SPIRAL WOUND STENT

Our Docket: 760-6

New Patent Application For:

IMPROVED COMPOSITE VASCULAR GRAFT

Our Docket: 760-7

New Patent Application For:

HELICALLY FORMED STENT/GRAFT ASSEMBLY

Our Docket: 760-12

Dear Luke:

We have prepared the above-identified applications in final form for filing in the U.S. Patent and Trademark Office. We enclose copies of each application including formal papers for execution.

We ask that you arrange to have the inventors review the applications and execute the formal papers where indicated. Once the papers have been executed, please return the papers to us and we will promptly file the applications in the U.S. Patent and Trademark Office.

If during the review process, the inventors have any changes they wish to make to the applications, please have them make the changes in ink and initial and date the changes in the margin. In that manner, we can still file the application as executed.

Luke Dohmen, Esq.

Page 2

If you have any questions or comments or wish to discuss the applications or the formal papers in further detail, please do not hesitate to contact us.

Very truly yours,

Salvatore J. Abbruzzese

SJA/mjm Enclosures





Scimed Life Systems, Inc. One Scimed Place Maple Grove, MN 55311-1566 612.494.1700 www.bsci.com

PRIVILEGED & CONFIDENTIAL via Federal Express

Salvatore J. Abbruzzese, Esq. Hoffmann & Baron, LLP 1055 Parsippany Blvd. Parsippany, NJ 07054

Re:

U.S. Patent Applications for:

- SPIRAL WOUND STENT
- IMPROVED COMPOSITE VASCULAR GRAFT
- HELICALLY FORMED STENT/GRAFT ASSEMBLY

Your Files: 760-6; 760-7; and 760-12

Our Files: SM-P0357-US01; SM-P0456-US01; and SM-P0406-US01



Dear Mr. Abbruzzesse:

Per Luke Dohmen's request, enclosed please find comments for each of the above-referenced patent applications. At your earliest convenience, would you please prepare a final draft for each application and forward these to Scimed for final review.

In addition, would you please add Chris Brodeur as a co-inventor to the "Improved Composite Vascular Graft" application. His complete name and address are as follows:

Christopher Brian Brodeur 741 98th Lane NE Blaine, MN 55434 Citizenship: U.S.A.

I have retained the formal papers for the other two applications and will have them executed upon receipt of the final draft patent applications.

In the meantime, if I can be of further assistance, please contact me at (612) 494-2532. Thank you for your prompt attention and assistance in this matter.

Very truly yours,

Liz DeMinico

Assistant to Luke Dohmen

Enclosures

cc: L. Dohmen (less enclosures)

EXHIBIT H

HOFFMANN & BARON, LLP

CHARLES R. HOFFMANN® RONALD J. BARON* GERALD T. BODNER® DANIEL A. SCOLA, JR.

A. THOMAS KAMMER SALVATORE J. ABBRUZZESE ALAN M. SACK IRVING N. FEIT

R. GLENN SCHROEDER SAMIR R. PATEL GLENN T. HENNEBERGER" WILLIAM D. SCHMIDT KIRK M. MILES JESSICA H. TRAN* ANTHONY E. BENNETT ROBERT F. CHISHOLM GREGORY W. BACHMANN* RODERICK S.W. TURNER* MARK E. BARON WAYNE L. ELLENBOGEN STEVEN T. ZUSCHLAG* KELLYANNE MERKEL

SUSAN A. SIPOS

MICHAEL P. MUNRO* PATRICK J. HOEFFNER* JAMES F. HARRINGTON KEVIN E. MCDERMOTT ROBERT C. MORRISS* NANCY A. BIRD* JOHN S. SOPKO BARRY H. JACOBSEN

ATTORNEYS AT LAW 1055 PARSIPPANY BLVD. PARSIPPANY, NEW JERSEY 07054 (973) 331-1700 FACSIMILE (973) 331-1717

NEW YORK OFFICE 6900 JERICHO TURNPIKE SYOSSET, N.Y. 11791 (516) 822-3550 FAX (516) 822-3582

NOT ADMITTED IN N.J. BENIOR ATTORNEY



t was

Luke Dohmen, Esq. SCIMED Life Systems, Inc. One SCIMED Place Maple Grove, MN 55311-1566

Re:

New Patent Application For: SPIRAL WOUND STENT

Our Docket: 760-6

New Patent Application For:

IMPROVED COMPOSITE VASCULAR GRAFT

Our Docket: 760-7

New Patent Application For:

HELICALLY FORMED STENT/GRAFT ASSEMBLY

Our Docket: 760-12

Dear Luke:

Further to our previous correspondence, we have prepared the above-identified applications in final form for filing in the U.S. Patent and Trademark Office. The final form of these applications have been prepared incorporating the comments provided to us by the inventors. Included with each copy of the application are formal papers including a Combined Declaration and Power of Attorney as well as an Assignment of Invention form.

We ask that if you and the inventors find these applications to be acceptable, please execute the formal papers and return them to us. Upon receipt of the formal documents, we will arrange to file the applications in the U.S. Patent and Trademark Office.

Luke Dohmen, Esq.

Page 2

If you or the inventors have any questions or comments or wish to discuss any portions of the application in further detail, please do not hesitate to contact us.

Very truly yours,

Salvatore, J. Abbruzzese

SJA/mjm Enclosures



Scimed Life Systems, Inc. One Scimed Place Maple Grove, MN 55311-1566 612.494.1700 www.bsci.com

VIA FEDERAL EXPRESS

HOFFMANN & BARON

Salvatore J. Abbruzzese HOFFMAN & BARON 1055 Parsippany Boulevard Parsippany, NJ 07054

RE: SPIRAL WOUND STENT

Our File No.: SM-P0357-US01

Your File No.: 760-6

IMPROVED COMPOSITE VASCULAR GRAFT

Our File No.: SM-P0456-US01

Your File No.: 760-7

HELICALLY FORMED STENT/GRAFT ASSEMBLY

Our File No.: SM-P0406-US01

Your File No.: 760-12

Dear Sal:

Enclosed are the executed patent applications with regard to the above-identified matters. Please place these applications on file with the United States Patent and Trademark Office as soon as possible.

If you have any questions, please call me.

Sincerely,

Luke Dohmen
Sr. Patent Attorney

LD:dl Enclosures

This Page is Inserted by IFW Indexing and Scanning Operations and is not part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:
☐ BLACK BORDERS
☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
☐ FADED TEXT OR DRAWING
☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
☐ SKEWED/SLANTED IMAGES
☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
☐ GRAY SCALE DOCUMENTS
LINES OR MARKS ON ORIGINAL DOCUMENT
☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.